

UNITED STATES MARINE CORPS
COMPANY C
MARINE CORPS COMMUNICATION-ELECTRONICS SCHOOLS
TRAINING COMMAND
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OFFICER STUDENT HANDOUT

Air Support Control Officer Course (T0A)

UPDATED: 11 Dec 01

LESSON DESIGNATOR: 1.08

LESSON TITLE: MACCS

<u>HOURS</u>	<u>METHODS</u>	<u>TRAINING SUPPORT EQUIPMENT</u>
1	L, MM	CCP, MM, SH, WB

TERMINAL LEARNING OBJECTIVE: In the classroom and without the aid of references, pass written tests encompassing lectures 1.01 through 4.05 with a score of 80% or greater.
(7208.109.1)

ENABLING LEARNING OBJECTIVE(S)

(1) Select from a list of options, the definition of centralized command and decentralized control, without the aid of but in accordance with the reference. (7208.109.1ao)

(2) Select from a list of options, the mission of the Marine Air Control Group (MACG), without the aid of but in accordance with the reference. (7208.109.1ap)

(3) Select from a list of options, the mission of the Marine Aviation Command and Control System (MACCS), without the aid of but in accordance with the reference.
(7208.109.1aq)

(4) List the units of the Marine Air Control Group (MACG), without the aid of but in accordance with the reference. (7208.109.1ar)

(5) Select from a list of options, the senior agency in the Marine Air Command and Control System (MACCS), without the aid of but in accordance with the reference. (7208.109.1as)

(6) Given a list of Marine units, list the tactical agencies each provides to the Marine Air Command and Control System (MACCS), without the aid of but in accordance with the reference. (7208.109.1at)

REFERENCE(S):

MCWP 3-2, Aviation Operations

MCWP 3-25, Control of Aircraft and Missiles

1. Centralized Command, Decentralized Control. Marine Corps air operations are conducted under a system of centralized command and decentralized control. The Marine Air Ground Task Force (MAGTF) commander exercises air command and control through the ACE commander (**centralized command**). In order to carry out this responsibility, the ACE commander uses the organization of the Marine Air Command and Control System (MACCS) (**decentralized control**).

A. Centralized Command is achieved when a **single Aviation Combat Element (ACE) commander is tasked with providing aviation support to the MAGTF** and prosecuting the air war.

B. Decentralized Control is achieved when the **ACE commander gives subordinate units the responsibility and authority to control aircraft** in the execution of the air plan.

2. Marine Air Control Group (MACG). The parent commands of the tactical units that make up the MACCS belong to the Marine Air Control Group (MACG). The **mission of the MACG is to plan for and coordinate aviation command and control for the Aviation Combat Element (ACE) and through its subordinate units, provide personnel and equipment as components of the Marine Air Command and Control System (MACCS) for the ACE of a MAGTF.** The MACG is made up of the following units (See Figure #1):

A. Marine Tactical Air Command Squadron (MTACS)

B. Marine Air Support Squadron (MASS)

C. Marine Air Control Squadron (MACS)

D. Low Altitude Air Defense Battalion (LAAD Bn)

E. Marine Wing Communications Squadron (MWCS)

3. Marine Air Command and Control System (MACCS). The MACCS gives the ACE commander the ability to exercise centralized command and coordination and decentralized control of MAGTF air assets and operations. The MACCS allows interface of MAGTF air with joint or combined operations. **The mission of the MACCS is to provide the ACE commander with the means to command, coordinate and control all air operations within an assigned sector.** The units of the MACG are shown below with the MACCS agencies or missile systems that they provide.

A. MTACS--TACC

(1) **The Marine Tactical Air Command Squadron (MTACS) provides equipment, maintenance, and operations for the ACE TACC as a component of the MAGTF.** It equips, mans, operates, and maintains the current operations section of the TACC. It also provides and maintains a facility for the TACC future operations and future planning sections and installs and maintains associated automated systems. It supports the TACC, which performs control of aircraft and missiles. The MTACS's major task is to provide the command post (CP) for the ACE commander. This involves the planning and coordination of air operations, deployment and employment issues, and logistical and supply support

(2) Control of aircraft and ground-based surface-to-air weapons systems is decentralized to the subordinate MACCS agencies. The principle agencies/detachments subordinate to the TACC are the Direct Air Support Center (DASC), Tactical Air Operations Center (TAOC), Marine Air Traffic Control Detachments, Air Defense Detachments, Marine Wing Communications Squadron Detachments and Low Altitude Air Defense (LAAD) units.

B. MASS--DASC

(1) **The Marine Air Support Squadron (MASS) provides the MACCS agency called the Direct Air Support Center (DASC).** The DASC is the principal air control agency responsible for the direction of air operations directly supporting ground forces and processing immediate air support requests. It functions in a decentralized mode of operation, but is directly supervised by the TACC.

(2) The DASC coordinates aircraft employment with other supporting arms through the senior Fire Support Coordination Center (FSCC). It is normally the first major air control agency ashore during amphibious operations and will land concurrently with the senior GCE FSCC.

C. MACS--TAOC, MATC Det

(1) The Marine Air Control Squadron (**MACS**) provides the **MACCS** agency called the **Tactical Air Operations Center (TAOC)**. The TAOC is the primary air defense antiair warfare (AAW) agency in the MACCS. Using its own sensors, the TAOC gathers information on the overall air picture and coordinates air-to-air and surface-to-air engagements in order to maintain air superiority. Using a task organized number of AN/TYQ-23 Tactical Air Operations Modules (TAOM), TPS-59 and continuous wave acquisition radars (CWAR), the TAOC recommends the deployment of assigned weapons, means of surveillance and the establishment of air defense sectors and subsectors of responsibility for itself and its subordinate elements. An Early Warning and Control Site (E/WC) may also be employed to augment the radar coverage of the TAOC.

(2) The **MACS** also provides the **Marine Air Traffic Control Detachment (MATC Det)**. The MATC Det provides all-weather air traffic control (ATC) services. They also provide ATC services at expeditionary air fields (EAF), remote landing sites (RLS), forward arming and refueling points (FARP) and any other primitive or undeveloped site where ATC services are required.

D. LAAD Bn--Stinger/Avenger Company, Platoon, Section

(1) The Low Altitude Air Defense (LAAD) Battalion provides the MAGTF with short-range, low-altitude air defense protection by employing the STINGER Guided-Missile System. This includes providing protection for units operating in forward combat areas or engaged in special independent operations.

(2) The Stinger Missile is capable of engaging and destroying hostile, low-flying, fixed- and rotary-wing aircraft and reconnaissance drones. The **Stinger Missile may be employed in the hand-held, shoulder-fired method or by using the Avenger vehicle mounted system.**

E. Marine Wing Communications Squadron (MWCS). The Marine Wing Communications Squadron (MWCS) is the primary communications organization within the Marine Aircraft Wing (MAW). The MWCS provides the communications support, including multi-channel, single channel and satellite communications (SATCOM), to link the ACE headquarters, agencies of the MACCS and ACE Forward Operating Bases (FOB) together. This is accomplished by the **two MWCS Detachments in each MWCS**.

F. MACCS Agencies not organic to the MACCS or ACE

(1) Some MACCS agencies are not organic to the MACG or ACE. These include the Tactical Air Control Party (TACP), which is part of the Marine Division and airborne controllers and coordinators, including the Forward Air Controller (Airborne) (FAC(A)), Tactical Air Coordinator (Airborne) (TAC(A)) and Assault Support Coordinator (Airborne) (ASC(A)).

(2) These non-organic parts of the MACCS are fully integrated into the MACCS through communications, doctrine and procedures. These terminal controllers and DASC extensions will be covered in detail in a later class.

4. The Marine Air Control Group (MACG)

<u>Parent Unit</u>	<u>Tactical Agency/Missile System</u>
MTACS	TACC
MASS	DASC
MACS	TAOC, ATC Detachments
LAAD Bn	LAAD Batteries, Companies, Platoons, Sections, (Stinger, Avenger)
MWCS	Communication Dets.

5. Additional tactical agencies of the MACCS.

<u>Unit</u>	<u>Provides</u>
Marine Division	TACP
Marine Air Wing	FAC(A), TAC(A), ASC(A), HST